

REMARKS

Claims 1-6, 8-11, 13-26, 30, and 46-49 are pending. Claims 1, 6, 8-11, 24, 30 have been amended. New claims 46-49 have been added. Claims 7, 12, 27-29, and 31-45 have been cancelled.

Rejections under 35 U.S.C. § 103

Independent claims 1, 6, and 24

Claim 1 stands rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,862,485 to Linneweh Jr. et al. ("Linneweh") and over U.S. Patent No. 5,530,912 to Agrawal et al. ("Agrawal"). Claims 6 and 24 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,438,370 to Einola et al. ("Einola").

As provided in MPEP § 2143, "[t]o establish a prima facie case of obviousness, ... the prior art reference (or references when combined) must teach or suggest all the claim limitations." Furthermore, under MPEP § 2142, "[i]f the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." It is submitted that the Office action fails to factually support a prima facie case of obviousness based on Linneweh, Einola, and Agrawal for the following reasons.

Even when modified, the cited references fail to teach or suggest all the claim limitations

Independent claim 1

Claim 1, as amended with elements of now cancelled claim 7, recites in part: "sending a relocation request message from the first node to the target node[.]"

The cited text of Linneweh and Agrawal, singly or in combination, fails to teach or suggest the above-recited element of claim 1. As claim 7 stands rejected under Einola, the remaining discussion of claim 1 (which now incorporates claim 7), will be directed towards Einola. Not only does Einola fail to teach or suggest the above-recited element of claim 1, Einola teaches away from claim 1 by disclosing two messages. More specifically, Einola recites:

When the "RELOCATION REQUIRED" message is received at a network entity, e.g. MSC or SGSN, part of RANMAP activities are suspended. Having suspended RANMAP, the MSC or SGSN sends a "RELOCATION REQUEST" message to the

target RNC. The "RELOCATION REQUEST" message generally contains a URAN information field, a relocation/hard handover indicator, and binding identifiers for lu-links to be established. (col. 11, lines 26-34) (emphasis added)

Therefore, contrary to claim 1, which recites "sending a relocation request message from the originating RNS to the target RNS[.]" Einola recites receiving a "RELOCATION REQUIRED" message by a network entity (e.g., a MSC or SGSN), which then sends a "RELOCATION REQUEST" message to the target RNC.

Accordingly, none of Linneweh, Agrawal and Einola (and the modifications thereof) teach or suggest all the elements of claim 1 as required by MPEP § 2143. Therefore, claim 1 is deemed allowable over the cited references.

Independent claim 6

Claim 6, as amended with elements of now cancelled claim 12, recites in part: "sending a relocation started message from the originating RNS to a Core Network (CN)" and "bi-casting, from the target RNS to the originating RNS and the CN, an acknowledge message."

The cited text of Einola fails to teach or suggest the above-recited elements of claim 6. More specifically, with respect to "sending a relocation started message from the originating RNS to a Core Network (CN)," Einola fails to teach or disclose this element as previously described with respect to the similar element of claim 1

In addition, the cited text of Einola fails to teach or suggest "bi-casting, from the target RNS to the originating RNS and the CN, an acknowledge message." More specifically, Einola discloses that "[t]he new 3G SGSN sends an acknowledgment to the old 3G SGSN" (col. 14, lines 22-23). Nowhere in the cited text can Applicant find a teaching or suggestion of bi-casting to two separate network entities as recited in claim 6. Accordingly, Einola fails to teach or suggest each element of claim 6 as required by MPEP § 2143 and claim 6 is allowable over the cited reference.

Independent claim 24

Claim 24, as amended with elements of now cancelled claims 27-29, recites in part: "means for preparing, by the acknowledge message, a tunnel to the CN for uplink packets; means for preparing, by the CN, a tunnel for downlink packets prior to completing the handoff to the target RNS; [and] means for sending, by the CN, the downlink packets to the originating RNS and the target RNS."

Not only does Einola fail to teach or suggest the above-recited elements of claim 24, but Einola actually teaches away from claim 24. For example, Einola fails to teach or suggest "means for preparing, by the acknowledge message, a tunnel to the CN for uplink packets." As MPEP § 2143 requires that the prior art reference must teach or suggest all the claim limitations to establish a prima facie case of obviousness, Einola cannot be used as such a reference. Accordingly, claim 24 is allowable over the cited reference.

Dependent claims

Claims 2-5, 8-11, 13-23, 25, 26, 30, depend from and further limit their respective independent claims and should be allowed for at least the same reason as the claim from which they depend.

New claims 46-49

New claim 46 recites:

A method for performing a handoff of a mobile device from a source radio network subsystem (RNS) to a target RNS in a wireless network, the method comprising:

 sending a relocation request message from the source RNS to the target RNS, wherein the relocation request message includes radio access bearer identifier information, resource reservation information, and an internet protocol (IP) address of a core network (CN) packet processing node serving the mobile device;

 sending a relocation started message from the source RNS to the packet processing node;

 reserving, by the target RSN, radio resources identified in the relocation request message;

 bi-casting a relocation acknowledgement message from the target RNS to the packet processing node and the source RNS, wherein the relocation acknowledgement message includes an IP address of a packet processing function within the target RNS;

 bi-casting downlink packets from the packet processing node to the source RNS and the packet processing function within the target RNS;

 buffering the downlink packets at the target RNS;

 sending a relocation commit message from the source RNS to the target RNS identifying a last packet sent from the source RNS to the packet processing node; and

sending packets from the target RNS to the mobile device beginning with a first packet, wherein the first packet is a buffered packet that immediately follows the last packet identified in the relocation commit message.

The cited references, taken either singly or in combination, fail to teach or suggest each element of claim 46 as required by MPEP § 2143. Accordingly, claim 46 is allowable over the cited references. Claims 47-49 depend from and further limit claim 46 and are allowable for at least the same reason as claim 46.

Conclusion

Therefore, it is respectfully submitted that all the claims in the application are in condition for allowance. Should the Examiner deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

T. F. Bliss

Timothy F. Bliss
Registration No. 50,925

Dated: February 17, 2004
HAYNES AND BOONE, LLP
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: 972/739-8638
Facsimile: 972/692-9101
File: 22171.141.02

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Gayle Conner
Gayle Conner